

IN THE CLAIMS:

Please cancel claims 19-27 and add new claims 28-36 as follows:

28. A signal transmission and receiving apparatus comprising a transmission apparatus and a receiving apparatus,

said transmission apparatus comprising:

- a mapper operable to map a data stream including audio and video information to an n-level digital mapped signal;

- a filter having a VSB characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic, said filter being operable to filter the n-level digital mapped signal to produce a VSB modulated signal; and

- a transmitter operable to transmit the VSB modulated signal;

said receiving apparatus comprising:

- a demodulator operable to demodulate the VSB modulated signal to the data stream including the audio and video information.

29. A signal transmission apparatus comprising:

- a mapper operable to map a data stream including audio and video information to an n-level digital mapped signal;

- a filter having a VSB characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic, said filter being operable to filter the n-level digital mapped signal to produce a VSB modulated signal; and

- a transmitter operable to transmit the VSB modulated signal.

30. A signal receiving apparatus comprising:

a receiver operable to receive a VSB modulated signal resulting from: (a) a mapper mapping a data stream including audio and video information to an n-level digital mapped signal, and (b) a filter filtering the n-level digital mapped signal, wherein the filter has a VSB

characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic; and

a demodulator operable to demodulate the received signal to reproduce the data stream including the audio and video information.

31. A signal receiving apparatus according to claim 30, further comprising a video decoder operable to decode the data stream to a video signal.

32. A signal receiving apparatus according to claim 31, further comprising an output part operable to output the video signal.

33. A signal receiving apparatus according to claim 31, further comprising a display operable to display the video signal.

34. A signal transmission and receiving method comprising a transmission method and a receiving method,

said transmission method comprising:

- mapping a data stream including audio and video information to an n-level digital mapped signal;

- filtering the n-level digital mapped signal with a filter having a VSB characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic, to produce a VSB modulated signal; and

- transmitting the VSB modulated signal;

said receiving method comprising:

- demodulating the VSB modulated signal to the data stream including the audio and video information.

35. A signal transmission method comprising:

- mapping a data stream including audio and video information to an n-level digital mapped signal;

- filtering the n-level digital mapped signal with a filter having a VSB characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic, to produce a VSB modulated signal; and

- transmitting the VSB modulated signal.

36. A signal receiving method comprising:

receiving a VSB modulated signal resulting from: (a) a mapper mapping a data stream including audio and video information to an n-level digital mapped signal, and (b) a filter filtering the n-level digital mapped signal, wherein the filter has a VSB characteristic, which covers a frequency band including a carrier frequency, and a roll-off characteristic; and

demodulating the received signal to reproduce the data stream including the audio and video information.